



## NJPDES BIOMONITORING REPORT FORM-ACUTE TOXICITY



Permit Number #: Permit Equivalent

**DSN: 001** 

Facility name:

Kin-Buc Landfill

Facility address:

383 Meadow Road

Edison, NJ

Facility contact person:

Glen Grieb

Phone number:

732.561.7600

Acute toxicity laboratory:

QC Inc.

1205 Industrial Highway Southampton, PA 18966

NJ/NELAC certification number:

77166

**Test Specifications:** 

Effluent Type: Final

Test Type: Modified static renewal (24-hour)

Test Results:

Test Start: 04/01/03

Test End: 04/05/03

Test endpoint: LC50

EC50 (%effluent): >100%

95% Confidence Interval: NA

Highest percent mortality in any top test concentration: 0%

Test organism:

Mysid Shrimp

common name

Mysidopsis bahia scientific name

**Quality Control Summary** 

Control Mortality (%): 10.0

Temperature maintained within 20 +/- 1 °C? Yes

Dissolved Oxygen Levels always greater than 40% saturation 2 Yes

Two or more concentrations exhibit a trend deviation?/No

Certification:

Accuracy of report certified by:

Robert A. Martino Laboratory Director Date

307562





#### Test Organism Data:

Test organism source: Aquatox, Inc.

## **Test Organism Acclimation:**

Is the culture water and test dilution water the same, and are the culture water temperature and dilution water temperature identical? No

### Mysid, Daphnids and Cladocerans:

Initial number of organisms: 150

Test organism age at start of test (days): 5 days

Culture water source: 40 Fathoms Culture water salinity: 25 ppt Culture water temperature: 25°C Dilution water source: Manasquan Inlet.

Dilution water salinity upon collection: 21.4 ppt Dilution water temperature upon collection: NA

Number of mortalities: < 5%

### Test Design:

Number of effluent test concentrations: 5 Number of replicates/test concentration: 4 Number of test organisms/replicate: 5 Volume of liquid in test chambers (liters): 0.20

Flow-through bioassay exchange rate (cycles/day): NA

## Effluent sampling:

Plant sampling location: Final effluent just before weir.

Effluent type: Final. Discharge: Continuous

Effluent sample type: 24 hour composite

Efflu	uent Sam	ple Collecti	on			ial Parame n Laborato			Use in Tes	-	Holding Time
Begini date	ning time	Endi date	ing time	temp ° C	рНі	d.o mg/L	Cond umhos	Chlorine ppm	date(s)	time(s)	(first use) hours
03/30/03	13.45	03/31/03	13:45	6.30	8.11	8.9	920	< 0.1	04/01/03	14:55	25:10
03/31/03	13:45	04/01/03	12:45	1.13	7.34	9.4	840	< 0.1	04/02/03	14:30	25:45
04/01/03	13.45	04/02/03	12:45	5.22	7.19	8.6	882	< 0.1	04/03/03	12:10	23:25
04/02/03	13:45	04/03/03	12:45	2.10	7.43	9.2	896	< 0.1	04/04/03	15:05	26:20
					<u> </u>	<u></u>	<u>.</u>	<u></u>	<u> </u>		

Testing location: QC Laboratories



#### **Effluent Sample Adjustments**

Were any salinity adjustments made? Yes If yes, specify the source of sea salts, brine or water used: Dry 40 Fathoms (biotechnical grade)

Were any pH adjustments made? Yes.

---pH / Chlorine Adjustment-----

	Volume	pH prior	Salinity	pH after	ml's 0.2N	pH after	TRC	Amt. STS	TRC after
Sample Used	Adjusted	to Salting	ppt	Salting	HCI Used	Adjustment	sample	added (mgs)	Addition
•					V 1.	***	The date of the same of the sa		
							akini umaninci		
. ,									

Was the effluent sample filtered in any manner? No If yes, please specify the mesh size:

Were any adjustments to the level of chlorine made? No.

If yes, specify the dechlorination agent used and the amount of reagent used: NA

Specify the chlorine levels prior to and after addition of the reagent: See data above.

Was an additional control included in the test containing the dechlorination agent? Yes, added to Control B.

### **Dilution Water:**

Effluent receiving water: Raritan River. Dilution water source: Manasquan Inlet.

If a substitute dilution water was used, had its use been approved by the NJDEP in the

acute methodology questionnaire?

Collection location: By Coast Guard station, Manasquan Inlet.

Collection date(s): 03/28/03

0 hour 24 hour 48 hour 72 hour 96 hour

LC50/EC50 (% effluent)

>100% >100% >100% >100% >100%

Calculation method: No measurable acute toxicity.

Is the calculated LC50/EC50 valid according to the specifications of the method used? Yes

#### Miscellaneous:

Were any exposure chambers aerated during the test? No

If yes, specify concentrations and duration, including the lowest percent saturation reached prior to aeration and at what time:

Were the test organisms observed for appearance and behavior at least daily? Yes

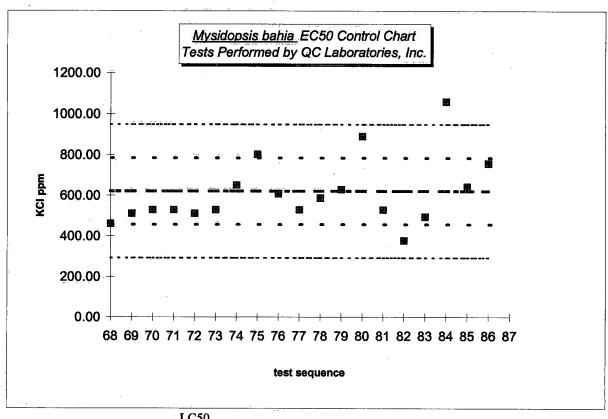


## **Additional Water Chemistry Parameters**

	Sample	Collection		(·)	ilution Wat	ter	1(	00% Efflue	nt
Begin	ning	End	ing	Alkalinity	Hardness	Ammonia	Alkalinity	Hardness	Ammonia
date	time	date	time	mg/L	mg/L	ppm	mg/L	mg/L	ppm
03/30/03	13:45	03/31/03	13:45	113.4	NA	NA	119.7	NA	NA
03/31/03	13:45	04/01/03	13:45				117.6	NA	NA
04/01/03	13:45	04/02/03	13:45				105.0	NA.	NA
04/02/03	13:45	04/03/03	13:45				84.0	NA	NA

Temperature Log

**Additional Comments:** 



		LC50					
Date	test number	ppm	MEAN	UCL 2SD	LCL 2SD	UCL 1SD	LCL 1SD
2/1/2002	68	462.00					
2/12/2002	69	512.27					*
2/25/2002	70	530.33					
3/19/2002	71	530.33	•				
4/22/2002	72	512.27					
5/13/2002	73	530.33					
6/3/2002	74	652.90					
6/25/2002	75	803.83			·		
7/16/2002	76	609.19					
8/13/2002	77	530.33					
8/28/2002	78	588.44					
9/24/2002	79	630.67					
10/7/2002	80	891.91					
10/22/2002	81	530.33					
12/4/2002	82	378.93					
1/13/2003	83	495.71					
1/21/2003	84	1060.66					
2/18/2003	85	644.93					
3/11/2003	86	759.67					•
3/25/2003	57	776.45	621.57	949.48	293.67	785.52	457.62
	CV	26.4%					



## **Acute Test Information**



Study Number: $\mathcal{L}$	1013822	Client: KIX-BUC Laxafell
Protocol: NJ		Water Bath/Incubator:
Date Initiated: 4/1/	03	Time Initiated: 1455
Date Terminated:		Time Terminated: 1305
Test Duration:	24-hour 48-hour 72-hour 96-hour Other:	·
Test Type:	6-hour static renewal 24-hour static renewal	static-no renewal
	flow-through/dilutor used:	other:
Test Material:	Effluent Receiving Water	Non Contact/Contact Cooling Water
	Pure Compound:	SRT Solution / Lot #:
	Other:	
Dilution Water:	Receiving Waters:	Synthetic / Lot #:
Salt Added to Effluent	t: Y N Test Salin	nity: 21, 0pp7
Brand of Artificial Salt	s Used: 40-Fathoms Other:	
Test Volume(ml's):	15 25 50 100 200	250 500 1000 other:
Number of Replicates	: 2 (4) 5 10 other: Number o	of Organisms / Replicate: 5 10 other:
Test Temperature (°C	): 20 22 25 other:	
Test Species:	Pimephales promelas Mysidsopsis bahia	Cyprinodon variegatus
	Daphnia pulex Ceriodaphnia dubia	other:
Source: In house	Commercial Supplier:	UATOX
Lot Numbe	er: $MAD0327BAge$ at test initiation: $5d$	ay Age range: 2411
Original Number of Or	ganisms Acclimated:	$\mathcal{P}$
Acclimation Initiated:	98103 Time: 1000 π°C: 28.23.	18Hi 7.96 D.O.I 8.9 Sali 24/1/
Acclimation Terminate  Date: 1	nd: 1155 Time: 1400 π°C: 20.1	pHf 7,99 D.O.1 7.2 Sal.1 21.4p
Time Organisms rema	ained in 100% Dilution Water:	% Dead:
Time Organisms Adde	ed to Test Chambers:	·
Comments		
•	VERIFICATION OF LABORATORY DIRECTOR	4/10/03
	TERM TOR OF ENDOUGHT ON F DIMEGIOR	DATE



Observations:

## MORTALITY/BEHAVIORAL OBSERVATIONS INVERTEBRATE TESTS

Study Number: £1013822

				211	OBSE	RVATION	TIME FRO			QC.	hours
	CONC		ours	24			hours		hours	<u> 10e</u>	hours
REP	(1.)	alive	obs	alive	obs	alive	obs	alive	obs	alive	obs
1A	Control	5	V)	5	Ņ	7	N	4	B	5	
1B		5	$\vdash$	<del>                                     </del>	<del>                                     </del>	9	<del>  \</del>	==-	<del>                                    </del>		$\aleph$
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1D		> _	<del>                                     </del>		<del>                                     </del>	<del>                                     </del>	<del></del>	5	N	34	IND N
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2D	<del>                                     </del>		<del>                                     </del>	<del>                                     </del>	<del>                                     </del>	<del>                                     </del>	<del>                                     </del>		<del>                                     </del>	1 1	
3A	20	-3-	$\vdash$	<del>                                     </del>	<del>                                     </del>		<del>                                      </del>			4	ID
3B	70	Springply	<del>                                     </del>	<del>                                     </del>			<del>                                      </del>		<del>                                     </del>	5	N
3C			<del> </del>	<del>                                     </del>	<del>                                     </del>	<del>                                     </del>	1				$ \mathcal{A} $
3D	+	S	<del>                                     </del>	<del>di "</del>	<del>  \</del>	4	<del>  \</del> /	4	<del>  √</del>	15	
4A	40 -	3	$\vdash$	H	17	77		$\overline{u}$	10	177	ν ΙΔ
4B	<u> 70 </u>	3		12	N	1 2 -	<del>  \( \( \) \\ \</del>	=	12	1 2	N
4C	<del>† †                                  </del>	<del>- 2</del> -	<del>   </del>		<del>  V</del>	1	1	1	17	<del>                                     </del>	17
4D	<del>  \</del>	5	<del>                                     </del>	<del>   </del>							
5A	(10)		<del>-   -   -   -   -   -   -   -   -   -  </del>			<del>                                     </del>					
5B		5							<del>   </del>	† <i>-  </i>	
5C		<u>5</u>								1	
5D	<b>S</b>	5				1	1	<b>V</b>	V	V	
6A	80	5				3	20	3	20	3	20
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6C		5				Ĭ			T	1. 1	
6D	V	5									
7A	100	5									
7B	1	5									
7C		5									
7D		3	V	V	V	V	V	V	V	V	V
************	Signature		J	KI	. )	4/3	J	-K	W.	14	$\omega$
	Date	4/1	53	4/	1/03	4/3	b3	4/4	1/03	45	103
	Renewal Time		55	Ü	<u> </u>	12	10	15	05	188	25
						1.5.5	<del></del>				

D Dead: no appendage movement F Fed	C Cannibalized I Immobile	
Comments:		
VERIFICATION OF LA	BORATORY DIRECTOR	DATE

can (Krow)



## **Physical/Chemical Parameters Sheet**

T=24/48 Hrs

Study Number: \$\mathcal{H}\) 1013822

T=0/24 Hrs

Incubator:

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, init		24	837	21.5	342	] .		initial	265	8 )	235	21 1	221
40 fir	nal 19 N	YKO	7.88	21.2	272	1	40	S-a1	7	2.5	300	01/1	200
		الهجيري		<del>di./</del>	340	4 .	_ · • -	final	<b>12.</b> 2	<u>⊃.</u> +	150	21.0	343
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60 m	nal 19.1	lo A	200	21 0	346		U	final	123	Za	200	115	341
no init	-10	20	Oil	0//0	TIT.	†		initial	20-7	0	Steal	2	33
<i>9</i> 4 )	17. 7	7.0	BAR	orte	01/0	1	80		au J	4.2	0.0	<b>∞</b> ⁄0, 8	221
OO fir	nal 19.2	Q.Q	80.8	217	378			final	6.3	59	8.06	21.3	338
init	ial (1), 4	8.9	୫.५୪	21.6	343		100	initial	a0.7	8.10	853	20.8	1331
100	nat 19 3	6.5	8.18	22.1	350		$ \infty $	final	12.2	61	8.18	21.2	227
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fin	nal							final					
Initials Lin	m	comments					Initials	m	Y 1	comments			
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	℃	mg/l	units	ppt	umhos	_	· <i> </i>	*	°C	mg/l	units	ppt	umhos
and In Pinit	ial 201	/: R	216	21.1	335		Δ.	/) initial	20.7	J	800	214	240
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tath. in	107	6.5	7:94	20.8	337	4	fath	final	201	64	801	21.5	242
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SO fin	nal 79.8 liai 199	6.2 8.1 6.2	7.94 8.53 8.00		-		100	initial	19.5	9.3	77 2	219	357 347
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## AQUATIC TOXICOLOGY LABORATORY CHAIN OF CUSTODY

Study Number:	101382	22		Facility Na	me or Code	E KUN	- Buc	La	ndfil	l	
Test Type:	Acute		□Chronic □		□Sediment		☐Pure Com	pound	□Other		
Sample Number*:	<b>D</b> D001	□D002	□D003	□E001	□E002	□E003	<b>□</b> E004	□E005	□E006		
If whole sample is co (note: if split, assign A, E						use:		Splits to be	e homogen	ized:	
Description of Sample	e:	Dilution W	/aters	10.41	tact Cooling V ater/pump an		□Contact C □Other:	cooling Water			
Location of Sampling	:	☐Final (pos ☐Receiving			□Final-Pred	chlorinated		□Final-Chlo	orinated		□Outfall Outlet
Sample type:		□Grab □Time Pro	portional		□24 Hour ( □Flow Prop				our Composi ted/Iced in Fi		
Sample Collection:		Date/Time Init	iated:				Date/Time Te	rminated:			
		Was samp	ler chain-o	f-custody s	eal intact a	t sample re	trieval:	□Yes	□No	<del> • • • • • • • • • • • • • • • • • • </del>	<u> </u>
Volume of Sample:		Liters / Gal	lons		Container	Туре:	□FDA Grad	de Plastic	□Glass	□Stainless	Steel
Storage and Transpo	ort Condition	is:	□lced/Coo		Temp. (°C)	upon collecti	on: □Ôvernigh	t Courier	-		
Relinquished by Sampler.			Date 3/20/10	Time 5/55C	Received By:	lon	Mala	<i>t</i>	Date 3/28/0	Time 1850	
Relinquished by:			Date	Time	Received By:	· •			Date	Time	!
Relinquished by:			Date	Time	Received By:				Date	Time	
Condition of Sample	upon Rece	ipt:	□ Centaine	d	□Accepted:	<u> </u>	□Compron	nised / Explai	n below	□Rejected	Explain below
Sample Refrigerated	(date/time/	sig.):									
		•			Sample Da	ata and Us	e				
temp (°C) pH	nitial Sample D D.O. (mg/L)	ata Cond.	TRC (ppm)	Ďa	Dates used in ate(s)	n Toxicity Tes Ti	t me(s)	Sample Split ID		Sample T Pate	erminated Time
20.58.12	7.9	24320	KO.1								
30 ) 0113		) <i>II</i>	7								
										not seem to the seem of the se	
Sample Manipulation	is:	□Salted						•			
•		□Aerated/I	Oue to:	<b>□</b> Supersat	turation	□D.O. < 4	0% of Sat. / fi	nal D.O. afte	r aeration:	mg/L	
		Dechlorin	ated		mgs anhyd	rous sodium	thiosulfate us	ed per liter (s	show math or	n below)	



# AQUATIC TOXICOLOGY LABORATORY CHAIN OF CUSTODY

Study Number:		22		Facility N	ame or Coo	le: Kux	x-Buc Landfill				
Test Type:	■ Acute		<b>E</b> Chronic		<b>□</b> Sedimen	t	☐Pure Con	npound	□Other □		
Sample Number*:	□D001	□D002	□D003	<b>DE</b> 001	□E002	□E003	□E004	□E005	□E006		
If whole sample is co (note: if split, assign A, E	-	• •		_	•	úsė:		Splits to b	e homogeni	zed:	
Description of Sample	e:	<b>□</b> Effluent □Dilution V	Vaters		ntact Cooling vater/pump a		□Contact ( □Other:	Cooling Wate	f		
Location of Sampling	ŗ.	☐Final (pos ☐Receiving	st treatment)  J Waters		□Final-Pre	echlorinated		☐Final-Chl ☐Other:	orinated		☐Outfall Outlet
Sample type:		□Grab □Time Pro	portional		1024 Hour □Flow Pro	Composite portional			our Composit ted/Iced in Fi		
Sample Collection:		Date/Time Ini Was sami	1/13	f-custody	3'seal intact	S at sample re	Date/Time Te	rminated: 5103 DYes	13	:45	
Volume of Sample:		Liters / Ga	llong		Containe	Туре:	<b>TATO</b> A Gra	de Plastic	□Glass	□Stainless	Steel
Storage and Transpo	ort Condition	ns:	Field Coll		Temp. (°C) sported to Lat	upon collecti	on: □Overnigh	t Courier	-		
Relinquished by Sampler:			Date	17,70g	Received By	1 mi	laut		Date 3/3/13	Time	
Relinquished by:	The		Date	Time	Received By				Date	Time	
Relinquished by:			Date	Time	Received By				Date	Time	
Condition of Sample			□Containe	d	<b>B</b> Accepte	d	□Compror	nised / Expla	in below	□Rejected a	Éxplain below
Man De la	M 2	13113 1	bo'r		Sample D	ata and Us	0				
temp (°C) pM	D:0. (mg/L)	eita Cond.	TRC (ppm)	0	Dates used late(s)	in Toxicity Test Tir	ne(s)	Sample Split ID	D	Sample T	erminated Time
6.3811	8.9	9200	40.1	34/11	B	145	5		4/2/	<b></b>	<i>SOO</i> )
			•.•								
Sample Manipulation	is:	<b>□</b> Salted				<u> </u>					•
		□Aerated/l	Due to:	Supersa	aturation	<b>□</b> D.O. < 4	0% of Sat. / f	inal D.O. afte	r aeration:	mg/L	
□Dechlorinated				mgs anhydrous sodium thiosulfate used per liter (show math on below)							



## AQUATIC TOXICOLOGY LABORATORY CHAIN OF CUSTODY

Sample Number*: □D001 □D002 □D003 □E001 □E002 □E003 □E004 □E005 □E006  If whole sample is comprised of splits, will the splits be homogenized prior to use:  (note: If split, assign A, B, Cto sample number—add Z if samples are homogenized.)  Description of Sample:  □Dilution Waters □Dilution Waters □Groundwater/pump and treat □Dilution Waters □Groundwater/pump and treat □Dilution Waters □Groundwater/pump and treat □Other:  Location of Sampling: □Final (post treatment) □Final-Prechlorinated □Other:  □Grab □D44 Hour Composite □Time Proportional □Priow Proportional □Receiving Waters □Other:  Sample type: □Grab □D44 Hour Composite □Time Proportional □Priow Proportional □Refrigerated/heed in Field  Sample Collection: □Assistant Sample retrieval: □Yes □No  Volume of Sample: □CAS Sample Conditions: □Messicooler □Temp. (*C) upon collection: □Yes □No  Refirmulatioday Samples: □Cas □Cas □Cas □Cas □Cas □Cas □Cas □Cas											
Study Number:	10138	22		Facility Na	ame or Cod	e: Kin	-Buc	: La	xdfil	L	
Test Type:	Acute		<b>□</b> Chronic		□ Sediment	t	□Pure Con	npound	□Other		
Sample Number*:	□D001	□D002	□D003	□E001	E002	□E003	□E004	□E005	□E006		
		-	-	_	•	use:		Splits to b	e homogeni	zed:	
Description of Sampl	e:		Vaters		-			Cooling Wate	г		
Location of Sampling	:				□Final-Pre	chlorinated			orinated		Outfall Outlet
Sample type:			portional					•	/ /	,	
Sample Collection:	_	3.	31-03	<b>&gt;</b>		t sample re	4-1	-03		45	
Volume of Sample:	2.50	-						de Plastic	□Glass	□Stainless	Steel
Storage and Transpo	ort Condition	ns:		•				t Courier	-		
Relinquished by:	JUS	W	41-03	1330		1m_i	/alay	<i>Y</i>	4-/23	1330	
Relinquished by:			Date	Time	Received By:	· · · · · · · · · · · · · · · · · · ·	·	3 192	Date	Time	
Condition of Sample	upon Rece	ipt:	Containe	d	Accepted	<u> </u>	□ Compror	nised / Explai	n below	□Rejected	/ Explain below
Sample Refrigerated	(date/time/	sig.):								٠.	
		•			Sample Da	ata and Us	e ·				
1	nitial Sample D	ate		1		n Toxicity Test		Sample	T	Sample T	erminated
temp (°C) pH	D.Q. (mg/L)	Cond.	TRC (ppm)	Da	ate(s)	Tir	ne(s)	Split ID	De	ate	Time
1.13 7.39	9.4	840	0.00	47	03	143	<u> </u>		4-3-	- <i>U</i> S	800
				I		<u> </u>		<u>L</u>	<u></u>	<del></del>	<u> </u>
Sample Manipulation	ns:	□8alted		· .							
		□Aerated/I	Oue to:	□Supersa		□D.O. < 40	0% of Sat. / fi	nal D.O. afte	r aeration:	mg/L	
		□ Dechlorir	nated	•	_mgs anhydi	rous sodium (	thiosulfațe us	ed per liter (s	how math on	pelow)	
					•	a <sub>1</sub> .					



## AQUATIC TOXICOLOGY LABORATORY CHAIN OF CUSTODY

						MIN UI							
Study Num	nber: $\mathcal{F}$	10138	322		Facility N	lame or Cod	ie: Kvx	-Bu o	Kano	YUL			
Test Type:		Acute		Chronic		□Sedimen	1	☐Pure Cor	npound	□Other			
Sample Nu	imber*:	<b>□</b> D001	□D002	□D003	□E001	□E002	<b>2</b> €003	□E004	□E005	<b>□</b> E006			
		mprised of I, Cto sampl				ized prior to enized.)	use:		Splits to b	oe homogeniz	ied:		
Descriptior	n of Sampl	<b>e</b> :	Dilution V	Vaters		ntact Cooling water/pump ar		□Contact ( □Other:	Cooling Wate	er			
ocation of	f Sampling	:	ElFinal (pos	t treatment) Waters		□Final-Pre	chlorinated		□Final-Ch □Other:	lorinated		□Outfall Ou	tiet
Sample tyr	oe:		☐Grab ☐Time Pro	portional		☐24 Hour	Composite portional			lour Composite ated/Iced in Fie			
Sample Co	ollection:		Date/Time Ini	1-1-0		/2.5		Date/Time Te	2	2-03 0No	119	15	]
Volume of	Sample:		Liters / Ga		- oustouy	Container	•		de Plastic		□Stainless	Steel	
Storage an	d Transpo	rt Condition	is:	Gloed Cool	er ected/Trans	Temp. (°C) sported to Lab	upon collecti	on: □Overnigh	t Courier	<del></del>			
Relinquished b	y sampler: UVS+ py:	Sal		Date Y-ZUZ Date	Time (50)	Received By	mi	belat	-	428	Time /500 Time		
lelinquished t	oy:	<del>-</del>		Date	Time	Received By:				Date	lime .	-	
Condition o	of Sample	upon Rece	ipt:	☐Cerrtained	j	DAccepted		□Compror	nised / Expla	in below	□Rejected	/ Explain belo	)W
Sample Re	efrigerated	(date/time/	sig.):										
						Sample D	ata and Us	ө					
tomo (°C)	jr pH	nitial Sample D D.O. (mg/L)	ata Cond.	TRC (ppm)	,	Dates used i ate(s)	in Toxicity Test	ne(s)	Sample	Date Control		Terminated	
temp (°C)	710	2 ^	832	0.04	71	3.0	Τ	2	Split ID	1 4 4	,	800	me
Orec	1119	0.6	000	0101	· · · · ·	· <u></u>							
							<del> </del>			<del> </del>		1	<del></del>
Sample Ma	anipulation	s:	Salted							· <del>L</del>			
			□Aerated/[	Due to:	□Supersa	ituration	<b>□</b> D.O. < 46	D% of Sat. / fi	nal D.O. afte	er aeration:	_mg/L		
			□Dechlorin	ated	<u>* </u>	mgs anhydi	rous sodium (	thiosulfate us	ed per liter (	show math on b	elow)		



## AQUATIC TOXICOLOGY LABORATORY CHAIN OF CUSTODY

Study Number: \$1013822				Facility Name or Code: KIX - BUC Handfull							
Test Type:	st Type: MAcute		□ Chronic		□Sediment		□Pure Compound		Other		
Sample Number*:	<b>D</b> D001	□D002	□D003	□E001	□E002	<b>□</b> E003	<b>DE</b> 004	<b>□</b> E0 <u>0</u> 5	□E006		
If whole sample is comprised of splits, will the splits be homogenized prior to use:  (note: If split, assign A, B, Cto sample numberadd Z if samples are homogenized.)											
•		<b>D</b> Effluent □Dilution \	Vaters:	□Non-Contact Cooling Water □Groundwater/pump and treat		□Contact ( □Other:	ontact Cooling Water ther:				
			Final (post treatment)  Receiving Waters		□Final-Prechlorinated			□Final-Chlorinated □Other:			□Outfall Outlet
		□Grab □Time Pro	Grab  Time Proportional		₩24 Hour Composite			☐ Hour Composite ☐ Refrigerated/load in Field			
Sample Collection: Date/Ti		Date/Time/ini	tiated:	<del></del>				Date/Time Terminated:			
		Was same	oler chain o	12	45		4/3/0	3		45	
Was sampler chain-of-custody seal intact at sample retrieval:											
Storage and Transport Conditions: Temp. (°C) upon collection: 5.9											
DOvernight Courier											
Refinquiened by Sampler:	Date /	Time	Received By:	1.5	1/2/		Date 1/2/2	Time	]		
Relinquished by:	- fl	MANA_	Gate 7	1520 Tipe	Received By:	Un_	Vuch	<i> -</i>	4/3/8 Date	/530 Time	
Relinquished by:			Date	Time	Received By:			<del></del>	Date	Time	
			i i	<u> </u>	/			<del></del>			J
Condition of Sample upon Receipt:   Contained   Contai										/ Explain below	
Sample Refrigerated (date/time/sig.):											
Sample Data and Use											
ŀ	Initial Sample Data			Dates used in Toxicity Test			Sample			Sample Terminated	
temp (°C) pH	D.O. (mg/L)	Cond.	TRC (ppm)	Da L / / J	te(s)	Tim	ie(s)	Split ID	Da	*******	Time
21 7.43	9.2	896	0.07	<u> </u>		70	<u> </u>		4/5/2	<u>ර</u> ු	<b>20</b>
					····						
Sample Manipulations				1			<u> </u>				
□Aerated/			ue to:				% of Sat. / fir	nal D.O. after	r aeration:	_mg/L	
	□Dechlorin	ated	· · · · · · · · · · · · · · · · · · ·	_mgs anhydr	ous sodium t	niosulfate use	ed per liter (s	how math on t	pelow)		
			`.	• .						- i	